CLAIMS

What is claimed is:

1. A data processing system having recording means for recording relationships between objects where recording is done using object identifiers which are uniform in layout across all object types and furthermore where identifiers include the object type descriptor and an object number.

2. The data processing system of Claim 1, wherein the object number of the object identifier is a system-key (SYSKEY), relative row number or other such row address which allows for direct access to the object data.

3. The data processing system of Claim 1, wherein objects can be recorded only after a definition has been entered allowing for the object type to exist.

4. The data processing system of Claim 3, wherein new object types can be entered by a user based on supplied object classes at any time during the life of the system and does not require programmatic changes or recompilation.

5. The data processing system of Claim 4, where Object Classes provided are based on common entities used in commercial applications.

6. The data processing system of Claim 1, wherein relationships between objects can be recorded only after a definition has been entered allowing for the relationship type to exist between the two or more object types.

7. The data processing system of Claim 6, wherein new allowed relationship definitions can be entered by a user at any time during the life of the system and does not require programmatic changes or recompilation.

8. The data processing system of Claim 1, which allows for inquiries to be formulated to follow existing relationships from one entity type to another within the set of defined allowed relationships, and for execution of such inquiries.

9. The data processing system of Claim 8, which allows individual inquiries to have their own access security independent of other inquiries and be attached to separate menus.

10. A database system in which entities are stored in a finite set of relative tables (one for each object class), relationships are stored in a finite set of tables, and the meaningful interpretation of these two sets of tables is provided by schema definitions stored in another finite set of tables (RelDef and EntDef).

11. A machine-implemented database system comprising:

(a) entity recording means for recording data representative at least of a first entity instance belonging to a first entity class and a second entity instance which belongs either to the first entity class or a second eneity class;

(b) relation recording means, logically linked to the entity recording means, for recording first data identifying the first entity instance, second data which is opposed to the first data and identifies the secon entity instance and third data which is opposed to the first and second data and identifies one or more distinct relations which link the first entity instance to the second entity instance; and

(c) relation reporting means, operatively coupled to the relation recording means, for examining data recorded in the realtion recording means according to a search algorithm based on one or two of the first through third data, for identifying the opposed two or one of the first through third data and for reporting

the identity of said opposed two or one

12. The system of Claim 11 wherein the entity recording means comprises:

(a.1) a plurality of Entity-instances (Ei) tables each for recording data representative of entity instances which belong to an entity class associated with that Ei table; and

(a.2) an Entity-class defining table for recording entity-class data representative of distinct entity classes and opposed to such entity-class data, EiT data identifying one Ei table where all instances of the corresponding entity-class are recorded.

13. The system of Claim 12 wherein the relation recording means comprises:

(b.1) a plurality of Relation-instances (Ri) tables each of recording data representative of the distinct relations between the first and secon entity instances and for associating each of the relations with a distinct relationship class; and

(b.2) a Relation-class defining table for recording relation-class data representative of each relation-class data representative of each relation class and opposed to such relation class data, RiT data indentifying one Ri table where all instances of the corresponding relation-class are recorded.

14. A method for defining in a computerized database system, relations between entitities, the method comprising:

recording first data defining a first entity class;

recording second data defining a second entity class;

recording third data defining a first group of entity instances belonging to the first entity class;

recording fourth data defining a second group of entity instances belonging to the second entity class;

and

recording fifth data expressly defining a relationship instance and connecting said relationship instant to an instance of the first entity class and to an instance of the second entity class.